Important Advances in Clinical Medicine

Epitomes of Progress—Urology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in urology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in urology which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Urology of the California Medical Association and the summaries were prepared under its direction.

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Diagnostic Fine-Needle Aspiration

FINE-NEEDLE ASPIRATION is a simple and safe method of great benefit in diagnosing malignant lesions. In most circumstances, 5-ml plastic Luer Lock syringes, 20-gauge needles and fixative solution are the only equipment needed.

Fine-needle aspiration can assist in diagnosing cancer in such diverse organs as the thyroid, breast and prostate, with minimal discomfort to the patient, and such a preoperative diagnosis greatly facilitates discussion regarding any planned ablative procedure. However, the technique has not yet advanced to the point where it can totally replace open or cutting-needle biopsy.

Aspiration biopsy is useful in the diagnosis and follow-up of secondary cancer as well. The malignant character of superficial lesions such as skin nodules or subcutaneous lymph nodes can be established without resort to incisional or excisional biopsy. Not only are the hazards of such procedures avoided but, because removal offers no therapeutic benefit, the lesion can be left in situ and used as a precise marker to follow the patient's response to treatment. Deep-seated masses which might otherwise require laparotomy are amenable to percutaneous needling, which is sometimes guided by fluoroscopy, ultrasound or computed tomography control.

Diagnosis depends on the evaluation of small pieces of tissue or individual cells and, thus, requires a skilled cytologist. It is emphasized that a positive result is highly significant. Negative findings on aspiration, due frequently to technical factors, are not helpful unless clear fluid is obtained, indicating the presence of a benign cystic disorder.

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REFERENCES

Kline TS, Neal HS: Needle aspiration biopsy: A critical appraisal—Eight years and 3,267 specimens later. JAMA 239:36-39, Jan 2, 1978

Pollen JJ, Schmidt JD: Diagnostic fine needle aspiration of soft tissue metastases from cancer of the prostate. J Urol 121: 59-61, Jan 1979

Ultrasonography in Evaluation of the Scrotum

EXAMINATION of the scrotum when underlying inflammatory, neoplastic or traumatic conditions are involved can be a difficult task. Frequently the presence of fluid, blood or inflammatory reaction surrounding the testes, as well as the patient's